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10/542,860

07/21/2005

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EXAMINER

BOLOURCHI, NADER

ART UNIT

PAPER NUMBER

2611

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04/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/542,860 | Applicant(s) BACHMANN ET AL. | |
| | Examiner NADER BOLOURCHI | Art Unit 2611 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/21/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/4/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. Applicant's amendment dated 7/21/2005 is entered.
2. No claim is allowed.

Priority

3. It is noted that this application appears to claim subject matter disclosed in prior International Application PCT/DE03/04027, filed 12/4/2003. A reference to the prior application must be inserted as the first sentence(s) of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e), 120, 121, or 365(c). See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, 121, or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or

sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference

in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

4. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Germany on January 22, 2003.

Information Disclosure Statement

5. The information disclosure statement (IDS) submitted on 8/4/2005 have been considered and made of record by the examiner.

Claim Rejections - 35 USC § 112, second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the data sources" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the message content" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the sender address" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the clock generators" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the cycle time of" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is recommended to replace with the phrase - - with a cycle time - -.

7. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "constant cycle times" (line 5), which term "constant" makes it vague and unclear. It is not clear what the term "constant" is referring to? One of the ordinary skills in the art will recognize that the phrase "cycle" is used for a periodic signal, and refers to a time period, which has a constant length of time. Furthermore, phrase "time cycle", refers to a periodic signal, e.g., a clock signal. Does applicant mean to say - - constant time cycle - - ?

Claim 1 recites “a consecutive clock generator number” (line 6), which term “consecutive” makes it vague and unclear. It is not clear what the term “consecutive” is referring to? How “a ... number” can be “consecutive”? The phrase “consecutive” can be applied if there are more than one numbers, to indicate following one after the other in order. Does applicant mean to say - - a clock generator number - - ?

Claim 1 recites “is transmitted together with a message counting number that is consecutive during the cycle time” (line 7), which term “consecutive” makes it vague and unclear. It is not clear what the term “consecutive” is referring to? How “transmitted together” can be “consecutive during the cycle time”?

Claim 1 recites “predefining in constant cycle times, for all the data sources, a consecutive clock generator number” (lines 5 and 6), which term “predefining” makes it vague and unclear. It is not clear what the term “predefining” is referring to? Does it refer to predefining “constant time cycles”? Or does it refer to predefining “a clock generator number”?

Claim 2 recite “for example five clock generator numbers” (line 3), which term “for example” makes it vague and unclear. It is not clear whether the claimed narrower range “five clock generator numbers” is a limitation. See 2173.05(d) [R-1].

Claim 3 is rejected due to its dependency to rejected claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3 rejected under 35 U.S.C. 102(b) as being anticipated by CARROLL et al. (WO 98/03910).

Regarding claim 1, CARROLL et al. disclose a method for ensuring a same order of messages in a plurality of data sinks (Fig. 1), comprising: transmitting data messages to the data sinks in parallel and independently of one another (“a distributed system ... a collection of distinct process” in page 1: lines 11-24; a plurality of nodes” in page 3: line 23 to page 3: line 14), and predefining in constant cycle times (“a logical clock” in lines 19-24; “means for applying a timestamp” in page 3: line 23 to page 3: line 14), for all the data sources (“means for applying a timestamp to each output message” in page 3: line 23 to page 3: line 14), a consecutive clock generator number (“single integer timestamp” in lines 19-24; or “use real clock value” in page 10: line 25 to page 11: line 3), which is transmitted together with a message counting number that is consecutive during the cycle time and with the message content to the data sink (“a single integer timestamp on each message, corresponding to the time the message was sent” in page

1: lines 19-24; “means for outputting such ordered and timestamped message” in page 3: line 23 to page 3: line 14)

Regarding claim 2, CARROLL et al. disclose as stated in rejection of claim 1 above.

CARROLL et al. also disclose that the data sinks sort the received messages after the reception of a specific number of different clock generator numbers (“the delivery means” in page 3: lines 12-14’ “method of ordering data messages” in page 4: lines 10-26; “bus acts as a message sequencer” in page 21: lines 4-21), for example five clock generator numbers, according to the clock generator number, the sender address and the message counting number (“timestamp”, “seniority indicator”, and “the place of said data message in the ordered sequence” in page 3: lines 15-23)

Regarding claim 3, CARROLL et al. disclose as stated in rejection of claim 1 above.

CARROLL et al. also disclose synchronizing the clock generators using a central clock generator, the cycle time of which is a multiple of the cycle time of the clock generators, each data source being assigned a dedicated clock generator (“this requiring that at every external input all real clock readings are unique and grow monotonically” in page 10: line 25 to page 11: line 3; “a real clock synchronized” in page 12: lines 8-21; “local clock” and “real clock” in page 12: line 1 to page 13: line 5, which shown in Fig. 2 and Fig. 3).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lamport, "Time, Clocks and the Ordering of Events in a Distributed System," Communications of the ACM, Vol. 21, No. 7, 1978 pp. 558-565; Fridge, "Logical Time in Distributed Computing Systems," IEEE Computer 24(8), August 1991, pp. 28-33; de Boisseron et al. (US 4,930,124 A); Carroll et al. (US 6,327,630 B1), which all individually or in combination address the applicant's invention.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nader Bolourchi whose telephone number is (571) 272-8064. The examiner can normally be reached on M-F 8:30 to 4:30.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David. C. Payne can be reached on (571) 272-3024. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/David C. Payne/

Supervisory Patent Examiner, Art Unit 2611